

IN THE CLAIMS:

The following is a complete listing of the claims. This listing replaces all earlier versions and listings of the claims.

Claims 1-23 (canceled)

Claim 24 (currently amended): An image processing device comprising:

a scanner for reading an image of a document and outputting an image signal;

a control unit, ~~including a control circuit~~, adapted for controlling said image processing device and performing image processing on the image signal output from said scanner, to provide a first processed image signal, the image processing being processing that is necessary for copying;

a first bidirectional general-purpose interface adapted for transmitting, under control of said control unit, the image signal output by said scanner to an external computer, which performs image processing on the transmitted image signal to provide a second processed image signal, and for receiving the second processed image signal from the external computer, the image processing performed by the external computer being processing that is necessary for copying; and

a second bidirectional general-purpose interface, of a same standard as said first bidirectional general-purpose interface, adapted for outputting the first processed image signal and the second processed image signal to a printer,

wherein said image processing device has a plurality of modes including a read mode, a print mode, a first copying mode, performed in response to a copying designation by a user, and a second copying mode ~~in which the image signal output from said scanner is outputted to the printer without being processed by the external computer,~~

wherein, in the first copying mode, the image signal from said scanner is transmitted ~~in order of:~~ to the external computer where the image signal is processed into the second processed image signal via said control unit[[,]] and said first bidirectional general-purpose interface, the external computer, and thereafter the second processed image signal is transmitted to the printer via said first bidirectional general-purpose interface, said control unit, and said second bidirectional general-purpose interface, so as to perform copying based on the second processed image signal,

wherein, in the second copying mode, the image signal from said scanner is transmitted ~~in order of:~~ to said control unit where the image signal is processed into the first processed image signal and the first processed image signal is transmitted to the printer via said second bidirectional general-purpose interface, so as to perform copying based on the first processed image signal, and

wherein the image processing performed by the external computer in the first copying mode is different from the image processing performed by the control unit in the second copying mode.

Claims 25 and 26 (canceled)

Claim 27 (currently amended): An image processing method for an image processing device capable of operating in a plurality of modes including a read mode, a print mode, a first copying mode, and a second copying mode, said method comprising the steps of:

in the first copying mode, performed in response to a copying designation by a user:

reading an image of a document and outputting an image signal by means of a scanner;

transmitting the image signal output by the scanner to an external computer, via a first bidirectional general-purpose interface, wherein the external computer performs image processing on the transmitted image signal to provide a second processed image signal, the image processing being processing that is necessary for copying;

receiving the second processed image signal from the external computer via the first bidirectional general-purpose interface; and

outputting the second processed image signal to a printer via a second bidirectional general-purpose interface of a same standard as the first bidirectional general-purpose interface, and

in said second copying mode:

reading an image of a document and outputting an image signal by the scanner;

performing, in a control unit for controlling the image processing device, image processing on the image signal output by the scanner, to provide a first

processed image signal, performed by the control unit the image processing being processing that is necessary for copying; and

outputting the first processed image signal to the printer via the second bidirectional general-purpose interface,

wherein each of the first and second copying modes is performed in response to a designation of corresponding one of the first and second copying modes, and

wherein the image processing performed by the external computer in the first copying mode is different from the image processing performed by the control unit in the second copying mode.

Claim 28 (canceled)

Claim 29 (previously presented): The method according to claim 27, wherein the transmitted image signal is processed by the external computer and transmitted to a public telephone line.

Claims 30-57 (canceled)

Claim 58 (previously presented): The image processing device according to claim 24, wherein said scanner generates a color image signal.

Claim 59 (previously presented): The image processing device according to claim 24, wherein said control unit has a density adjusting function.

Claims 60 and 61 (canceled)

Claim 62 (currently amended): An image processing method using an image processing device capable of operating in a plurality of modes including a read mode, a print mode, a first copying mode in response to a copying designation by a user, and a second copying mode, said method comprising the steps of:

reading an image of a document and outputting an image signal by means of a scanner;

in the first copying mode, transmitting the image signal output by the scanner to an external computer, via a first bidirectional general-purpose interface, performing image processing on the transmitted image signal in the external computer to provide a first processed image signal, transmitting the first processed image signal to the image processing device, via the first bidirectional general-purpose interface, and outputting the first processed image signal to a printer via a second bidirectional general-purpose interface of a same standard as the first bidirectional general-purpose interface, the image processing being processing that is necessary for copying; and

in the second copying mode, performing image processing on the image signal output by the scanner, in a control unit for controlling the image processing device, to provide a second processed image signal and outputting the second processed image signal to the printer via the second bidirectional general-purpose interface, performed by the control unit the image processing being processing that is necessary for copying, and

wherein the image processing performed by the external computer in the first copying mode is different from the image processing performed by the control unit in the second copying mode.

Claim 63 (currently amended): An image processing system comprising:

an information processing apparatus comprising:

a read designation unit, adapted to designate a start for reading of a document;

a print designation unit, adapted to designate a start for printing data that said information processing apparatus transmits;

a copying designation unit, adapted to designate a start for copying; and

a processing unit, adapted to process an image signal to provide a second processed image signal; and

an image processing apparatus comprising:

a scanner for reading an image of a document and outputting an image signal;

a control unit, ~~including a control circuit~~, adapted for controlling said image processing apparatus and performing image processing on the image signal output from said scanner, to provide a first processed image signal, the image processing being processing that is necessary for copying;

a first bidirectional general-purpose interface for transmitting, under control of said control unit, the image signal output by said scanner to

said information processing apparatus, which performs image processing on the transmitted image signal to provide ~~[[a]]~~ the second processed image signal, and for receiving the second processed image signal from said information processing apparatus, performed by said image processing apparatus the image processing being processing that is necessary for copying;

a second bidirectional general-purpose interface, of a same standard as said first bidirectional general-purpose interface, adapted for outputting the first processed image signal and the second processed image signal to a printer; and

a copy key for designating a start for copying,

wherein said image processing apparatus has a plurality of modes including a read mode performed in response to a read designation by said information processing apparatus, a print mode performed in response to a print designation by said information processing apparatus, a first copying mode performed in response to a copying designation by said information processing apparatus, and a second copying mode ~~in which the image signal, output from said scanner, is outputted to the printer without being processed by the information processing apparatus,~~

wherein, in the first copying mode, the image signal from said scanner is transmitted ~~in order of:~~ to said information processing apparatus where the image signal is processed into the second processed image signal via said control unit[[,]] and said first bidirectional general-purpose interface, said information processing apparatus, and thereafter the second processed image signal is transmitted to the printer via said first bidirectional general-purpose interface, said control unit, and said second

bidirectional general-purpose interface so as to perform copying based on the second processed image signal,

wherein, in the second copying mode, the image signal from said scanner is transmitted ~~in order of:~~ to said control unit where the image signal is processed into the first processed image signal and the first processed image signal is transmitted to the printer via said second bidirectional general-purpose interface so as to perform copying based on the first processed image signal, and

wherein the image processing performed by the external computer in the first copying mode is different from the image processing performed by the control unit in the second copying mode.

Claim 64 (new): An image processing device comprising:

a scanner for reading an image of a document and outputting an image signal;

a control unit adapted for controlling said image processing device and performing image processing on the image signal output from said scanner, to provide a first processed image signal, the image processing being processing that is necessary for copying;

a first interface adapted for transmitting the image signal output by said scanner to an external computer, which performs image processing on the transmitted image signal to provide a second processed image signal, and for receiving the second processed image signal from the external computer, the image processing performed by the external computer being processing that is necessary for copying; and

a second interface adapted for outputting the first processed image signal and the second processed image signal to a printer,

wherein said image processing device has a first copying mode performed in response to a copying designation by a user, and a second copying mode,

wherein, in the first copying mode, the image signal is transmitted to the external computer where the image signal is processed into the second processed image signal via said control unit and said first interface, and thereafter the second processed image signal is transmitted to the printer via said first interface, said control unit, and said second interface, so as to perform copying based on the second processed image signal,

wherein, in the second copying mode, the image signal is transmitted to said control unit where the image signal is processed into the first processed image signal and the first processed image signal is transmitted to the printer via said second interface, so as to perform copying based on the first processed image signal, and

wherein the image processing performed by the external computer in the first copying mode is different from the image processing performed by said control unit in the second copying mode.

Claim 65 (new): The image processing device according to claim 64, wherein, in the first copying mode, said control unit receives command information for designating the start of the scanner to read the image from the external computer via said first interface, controls the scanner to start a read operation in accordance with the command information, transmits the image signal to the external computer via said first interface, receives print data as the second processed image signal from the external

computer via said first interface and transmits the print data as the second processed image signal to the printer via said second interface.

Claim 66 (new): The image processing device according to claim 64, wherein said image processing device has a print mode, in which print data is transmitted from the external computer to said control unit via said first interface and the printer prints the print data, and an image reading mode in which an image signal from the scanner is transmitted from said control unit to the external computer via said first interface.

Claim 67 (new): An image processing method for an image processing device capable of operating in a first copying mode and a second copying mode, said method comprising the steps of:

in the first copying mode, performed in response to a copying designation by a user:

reading an image of a document and outputting an image signal by a scanner;

transmitting the image signal output by the scanner to an external computer, via a first interface, wherein the external computer performs image processing on the transmitted image signal to provide a second processed image signal, the image processing being processing that is necessary for copying;

receiving the second processing image signal from the external computer via the first interface; and

outputting the second processed image signal to a printer via
second interface, and

in the second copying mode:

reading an image of a document and outputting an image signal by
the scanner,

performing, in a control unit for controlling the image processing
device, image processing on the image signal output by the scanner, to provide a first
processed image signal, the image processing being processing that is necessary for
copying; and

outputting the first processed image signal to the printer via the
second interface,

wherein the image processing performed by the external computer in
the first copying mode is different from the image processing performed by said control
unit in the second copying mode.